

ABSTRACT OF THE DISCLOSURE

An infusion system packaged in a light weight nylon portable mesh container, which is also the pump of the system, includes a removable therapy bag holding the Rx to be infused into the patient. A bladder within the pump is inflatable to provide pressure onto the therapy bag to aid in the discharge of the Rx. When filling the therapy bag, the pharmacist, using his computer to comply with standards, simultaneously programs an EPROM with data specifying the Rx as well as instructions for dispensing the Rx. In one embodiment of the invention, the EPROM fits into a docking receptacle in the pump, while in a second embodiment the EPROM is integral with the therapy bag. A microcomputer mounted in the pump is programmed to control the flow of the Rx to the patient, reading the data from the EPROM in generating the control signals. The microcomputer cyclically drives a fluid control module which outputs a fixed amount of Rx for each cycle of operation. Three fluid control modules are disclosed; a cavity which deliver a bolus of Rx for each rotor rotation, or a shuttling longitudinally displaceable "cork" positioned in the output connector of the therapy bag, or a squeezed tube. Flow is monitored, and alarm interrupts to the microcomputer are provided for flow failure generating appropriate alarms. An alarm shuts down system operation and alerts the patient by means of visual messages on the microcomputer display and by an audible alarm. A buffer memory in the pump stores data relevant to such a mishap for later examination to determine responsibility and cause. Data is tied to a real-time clock (date and time).

"Express Mail" mailing label number: EL 584210 367 45

Date of Deposit: May 10 2000

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231

Printed Name Shawn Hise

Signature [Signature]